<u>S/N 08/897,217</u>   **PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dawson F. Dean   Examiner: Lewis A. Bullock, Jr.

Serial No.: 08/897,217   Group Art Unit: 2755

Filed: July 14, 1997   Docket: 777.062US1

Title: INTERPROCESS COMMUNICATION MECHANISM FOR
             HETEROGENEOUS COMPUTER PROCESSES

PROPOSED DRAFT AMENDMENT AND RESPONSE

Assistant Commissioner for Patents
Washington, D.C. 20231

Applicant thanks examiner for the detail and specificity of his first action on the merits.

In response to the Office Action of April 30, 1999, applicant proposes to amend the above identified patent application as follows:

In the Claims

1.   (Amended once) A method for serving remote procedure calls from an applet which executes within an applet viewer which in turn executes in a computer system <u>that is serving said remote procedure calls</u>, the method comprising:

        receiving from the applet <u>which executes in the same computer system that serves said remote procedure calls,</u> a request for a document according to a document retrieval protocol implemented on a computer network;

        determining that the request specifies a function which is defined within a computer process executing independently of the applet and applet viewer and which includes one or more computer instructions, execution of which performs a task which is unrelated to retrieval of any document specified in the request; and

        executing the function <u>in the same computer system that is executing said applet and applet viewer</u> to thereby cause execution of the one or more computer instructions in response to receipt of the request.

3.   (Amended once) The method of Claim 1 further comprising:
        returning <u>to the applet</u> result data produced by execution of the function[to the

applet].

4.   (Amended once) The method of Claim 3 wherein the step of returning comprises:

forming a document which includes the data; and sending the document to the

applet.

6.   (Amended once) A computer readable medium useful in association with a

computer system which include[d] a processor and a memory, the computer readable medium

including computer instructions which are configured to cause the computer to serve remote

procedure calls from an applet, which executes within an[d] applet viewer which in turn executes

in the computer system that is serving said remote procedure calls, by performing the steps of:

receiving from the applet which executes in the same computer system that serves

said procedure calls, a request for a document according to a documen retrieval protocol

implemented on a computer network;

determining that the request specifies a function which is defined within a

computer process executing independently of the applet and applet viewer and which

includes one or more selected computer instructions, execution of which performs a task

which is unrelated to retrieval of any document specified in the request; and

executing the function in the same computer system that is executing said applet

and applet viewer to thereby cause execution of the one or more selected computer

instructions in response to receipt of the request.

8.   (Amended once) The computer readable medium of Claim 6 where the computer

instructions are further configured to cause the computer to serve remote procedure calls by

further performing the step of:

returning to the applet result data produced by execution of the function[to the

applet].

11.   (Amended once) A computer system comprising:

a processor;

Page 3
D.t.: 777.062US1

AMENDMENT AND RESPONSE
Serial Number: 08/897,217
Filing Date: July 14, 1997
Title: INTERPROCESS COMMUNICATION MECHANISM FOR HETEROGENEOUS COMPUTER PROCESSES

a memory operatively coupled to the processor; and

a computer process which executes in the processor from the memory and which, when executed, serves remote procedure calls from an applet which executes within an applet viewer which in turn executes in the processor from the memory concurrently and independently from the computer process, wherein the computer process serves remote procedure calls by performing the steps of:

receiving from the applet which executes in the same computer system that serves remote procedure calls, a request for a document according to a document retrieval protocol implemented on a computer network;

determining that the request specifies a function which is defined within the computer process and which includes one or more computer instructions, execution of which performs a task which is unrelated to retrieval of any document specified in the request; and

executing the function in the same computer system that is executing said applet and applet viewer to thereby cause execution of the one or more computer instructions in response to receipt of the request.

13.   (Amended once) The computer system of Claim 11 where the computer process serves remote procedure calls by further performing the step of:

returning to the applet result data produced by execution of the function[to the applet].

15.   (Amended once) The computer system of Claim 11 wherein the document retrieval protocol is HTTP.

16.   (Amended once) A method for serving remote procedure calls to an applet which executes within an applet viewer which in turn executes in a computer system that is serving said remote procedure calls, the method comprising:

AMENDMENT AND RESPONSE   **Page 4**
Serial Number: 08/897,217   D.t.: 777.062US1
Filing Date: July 14, 1997
Title: INTERPROCESS COMMUNICATION MECHANISM FOR HETEROGENEOUS COMPUTER PROCESSES

sending to a computer process executing in the same computer system that is executing said applet and applet viewer and executing independently of the applet and applet viewer, a request for a document according to a document retrieval protocol implemented on a computer network wherein the request includes data communicating to the computer process that the applet can receive at least one processing request;

receiving from the computer process as at least a portion of the document requested by the request, a processing request which specifies a function which in turn (i) is defined within the applet and (ii) includes one or more computer instructions; and

executing the function in the same computer system that is executing said applet and applet viewer to thereby cause execution of the one or more computer instructions in response to receipt of the processing request.

17.   (Amended once) A method for serving remote procedure calls to an applet which executes within an applet viewer which in turn executes in a computer system from a computer process executing in the same computer system that is executing said applet and applet viewer and executing independently of the applet and applet viewer, the method comprising:

receiving from the applet which executes in the same computer system serves said remote procedure calls, a request for a document according to a document retrieval protocol implemented on a computer network wherein the request includes data communicating to the computer process that the applet can receive at least one processing request;

sending to the applet as at least a portion of the document requested by the request, a processing request which specifies a function which in turn (i) is defined within the applet and (ii) includes one or more computer instructions; and

executing the function in the same computer system that is executing said applet and applet viewer to thereby cause execution of the one or more computer instructions in response to receipt of the processing request.

18.   (Amended once) A computer readable medium useful in association with a computer system which includes a processor and a memory, the computer readable medium

including computer instructions which are configured to cause the computer to serve remote procedure calls to an applet which executes within an applet viewer which in turn executes in the computer system that is serving said remote procedure calls, performing the steps of:

sending to a computer process executing independently of the applet and applet viewer which executes in the same computer system that is executing said applet and applet viewer, a request for a document according to a document retrieval protocol implemented on a computer network wherein the request includes data communicating to the computer process that the applet can receive at least one processing request;

receiving from the computer process as at least a portion of the document a requested by the request, a processing request which specifies a function which in turn (i) is defined within the applet and (ii) includes one or more computer instructions; and

executing the function in the same computer system that is executing said applet and applet viewer to thereby cause execution of the one or more computer instructions in response to receipt of the processing request.

19.   (Amended once) A computer readable medium useful in association with a computer system which includes a processor and a memory, the computer readable medium including computer instructions which are configured to cause the computer to serve remote procedure calls to an applet which executes within an applet viewer which in turn executes in a computer system from a computer process executing independently of the applet and applet viewer, by performing the steps of:

receiving from the applet which executes in the same computer system that serves said remote procedure calls, a request for a document according to a document retrieval protocol implemented on a computer network wherein the request includes data communicating to the computer process that the applet can receive at least one processing request;

sending to the applet as at least a portion of the document requested by the request, a processing request which specifies a function which in turn (i) is defined within the applet and (ii) includes one or more computer instructions; and

executing the function in the same computer system that is executing said applet

Page 6
D.t.: 777.062US1

AMENDMENT AND RESPONSE
Serial Number: 08/897,217
Filing Date: July 14, 1997
Title: INTERPROCESS COMMUNICATION MECHANISM FOR HETEROGENEOUS COMPUTER PROCESSES

and applet viewer to thereby cause execution of the one or more computer instruction in response to receipt of the processing request.

20.   (Amended once) A computer system comprising:

a processor;

a memory operatively coupled to the processor; and

an applet (i) which executes in an applet viewer which in turn executes in the processor from the memory and (ii) which, when executed, serves remote procedures calls to the applet by performing the steps of:

sending to a computer process executing independently of the applet and applet viewer which executes in the same computer system that is executing said applet and applet viewer, a request for a document according to a document retrieval protocol implemented on a computer network wherein the request includes data communicating to the computer process that the applet can receive at least one processing request;

receiving from the computer process as at least a portion of the document requested by the request, a processing request which specifies a function which in turn (i) is defined within the applet and (ii) includes one or more computer instructions; and

executing the function in the same computer system that is executing said applet and applet viewer to thereby cause execution of the one or more computer instructions in response to receipt of the processing request.

21.   (Amended once) A computer system comprising:

a processor;

a memory operatively coupled to the processor; and

a computer process which executes in the processor from the memory and which, when executed, serves remote procedure calls to an applet which executes within an[d] applet viewer, wherein the computer process serves remote procedure calls by performing the steps of: